

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,054	11/30/2000	Rufus W. Warren	47679-00015USP1	2710

7590 05/24/2004
Roger J. French, ESQ
Roger J. French, Attorney at Law
53 West Jackson Boulevard
Suite 1511
Chicago, IL 60604

EXAMINER

PHAM, THOMAS K

ART UNIT PAPER NUMBER

2121

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/727,054	Applicant(s) WARREN ET AL.	
	Examiner Thomas K Pham	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/05/01</u> . | 6) <input type="checkbox"/> Other: _____ |

First Action on the Merits

1. Claims 1-16 of U.S. Application 09/727,054 filed on 11/30/2000 are presented for examination.

Quotations of U.S. Code Title 35

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

4. Claims 2-9 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,307,295 ("Taylor").

Regarding claims 2 and 11

Taylor teaches modeling a lighting system, employing a computing system having graphic a

Art Unit: 2121

display, comprising: entering and storing lighting fixture data into said computing system (col. 7 lines 63-68, "The modeling system ... designed lighting effects"); entering and storing fixture support data into said computing system (col. 8 lines 1-16, "The lighting designer/programmer ... defined in the model"); entering and storing guide data into said computing system, said guide data including the types and locations of fixture supports and lighting fixtures (col. 5 lines 1-10, "entering in the computing ... color and beam direction"); computing from said guide data a two or three dimensional representation of said lighting system (col. 24 lines 33-47, "In order to determine ... with respect to the lamp"); and displaying said representation on said graphic display (col. 7 lines 19-23, "The modeling system ... the stored parameter data").

Regarding claims 3 and 12

Taylor teaches automatically constructing a relatively complex representation of an object based on a relatively simple representation of an object, comprising: generating a relatively simple representation of an object (col. 8 lines 48-56, "The modeling system ... the objects in the model"); and building a link between said relatively simple shape representation and a relatively complex representation of an object stored in a library (col. 9 lines 30-40, "As the programmer builds ... and programming process").

Regarding claims 4 and 13

Taylor teaches building comprises opening a dialog box and completing information in said dialog box (col. 4 lines 33-35, "8. The modeling process ... in valid sequences") identifying a link between said relatively simple representation of an object and said relatively complex representation of an object (col. 4 lines 49-50, "13. The modeling system ... between model objects").

Regarding claim 5

Taylor further including repeating the steps of generating a relatively simple representation of an object and building a link an additional one or more times (col. 5 lines 15-16, “(7) repeating prior steps ... display is achieved”).

Regarding claims 6, 7 and 14

Taylor teaches including storing each of the links (col. 27 lines 49-54, “The programmer can established ... as a model cue”).

Regarding claim 8, 9 and 15

Taylor teaches including recalling one or more of the links (col. 27 lines 54-58, “This model cue can ... the model cue was stored”).

5. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,828,485 (“Hewlett”).

Regarding claim 16

Hewlett teaches a method for automatically constructing arrays of complex shapes based on simple shapes, said method employing a computing system having graphic display means, data entry means, data processing means and a memory, said method comprising the steps of: entering and storing said complex shapes into said computing system (col. 6 lines 9-20, “Each memory area ... using image processing software”); entering and storing shape translation data into said computing system, entering and storing said simple shapes into said computing system (col. 7 lines 55-59, “This new images ... stored in the memory”) computing said arrays of complex shapes based on the parameters of said simple shapes (col. 7 lines 1-16, “the points of

Art Unit: 2121

the image ... the image is blocked"); and displaying said arrays of complex shapes on said monitor (col. 4 lines 36-50, "The light beam projected ... displayed on the stage").

Claim Rejections - 35 USC § 103

6. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,307,295 ("Taylor") in view of U.S. Patent No. 5,828,485 ("Hewlett").

Regarding claims 1 and 10

Taylor teaches modeling the utilization of substantially all of an emitted beam of a lamp in a lighting fixture by a gobo which is not necessarily the same diameter as a barrel of the fixture, said method comprising: computing a placement of a point source of light inside said lighting fixture to yield a specified beam angle (col. 24 lines 33-47, "In order to determine ... with respect to the lamp"). Taylor does not teach computing a placement of said gobo in front of said lighting fixture so the diameter of said gobo matches the diameter of said emitted beam emerging from said fixture. However, Hewlett teaches calculating a gobo stencil at each new location in association with the light fixture's movement (col. 7 lines 1-16, "the points of the image ... the image is blocked") for the purpose of a light beam shape altering device utilized in a stage lighting system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the gobos of Hewlett with the modeling system of Taylor because it would provide for the purpose of a light beam shape altering device utilized in a stage lighting system.

Art Unit: 2121

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874, Monday-Thursday and every other Friday from 7:30AM- 5:00PM EST or contact Supervisor *Mr. Anthony Knight* at (703) 308-3179.

Any response to this office action should be mailed to: **Director of Patents and Trademarks Washington, D.C. 20231**, or **Hand-delivered** responses should be brought to **Crystal Park II, 2121 Crystal Drive Arlington, Virginia, (Receptionist located on the 4th floor)**, or fax to the **official fax number (703) 872- 9306**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thomas Pham
Patent Examiner

TP

May 20, 2004


Anthony Knight
Supervisory Patent Examiner
Group 3600